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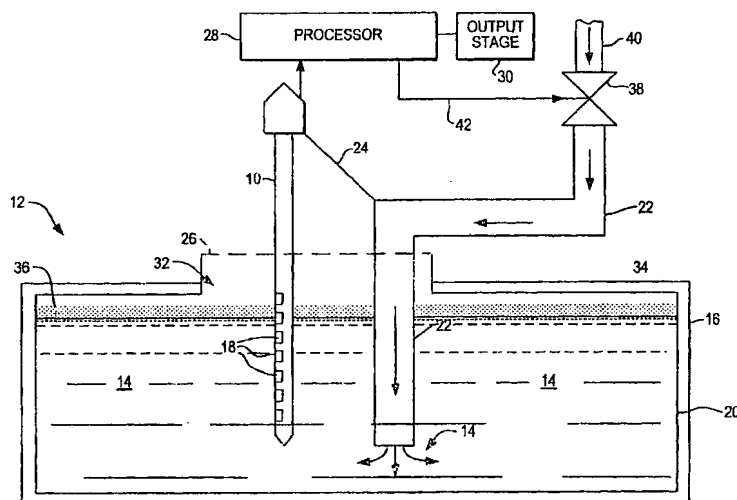
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(54) Title: MEASUREMENT OF MOLTEN SULFUR LEVEL IN RECEPTACLES



(57) Abstract: A portable temperature sensing probe having a plurality of thermocouples is inserted into a tank mounted on a truck or other receptacle at the time of loading a hot liquid, e.g., molten sulfur. The probe and at least a portion of the associated wiring or leads are attached to the loading pipe and/or discharge nozzle, and the probe is inserted into the interior of the tank before the molten sulfur is discharged. The signals from the plurality of thermocouples are amplified and the corresponding temperature information is transmitted to a display and control device. Due to the significant differential between the temperature of the rising molten sulfur and the vapors in the tank overhead space, the signals generated indicate which of the thermocouple are in contact with molten sulfur or the vapor zone. The generated signals adjust the shut-off valve that controls the flow of molten sulfur into the tank.